

Title (en)
VIDEO PROCESSING FOR MOTOR TASK ANALYSIS

Title (de)
VIDEOVERARBEITUNG ZUR ANALYSE MOTORISCHER AUFGABEN

Title (fr)
TRAITEMENT VIDÉO POUR ANALYSE DE TÂCHE MOTRICE

Publication
EP 3191989 A1 20170719 (EN)

Application
EP 15770696 A 20150907

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Abstract (en)
[origin: US2016071284A1] Video processing for motor task analysis is described. In various examples, a video of at least part of a person or animal carrying out a motor task, such as placing the forefinger on the nose, is input to a trained machine learning system to classify the motor task into one of a plurality of classes. In an example, motion descriptors such as optical flow are computed from pairs of frames of the video and the motion descriptors are input to the machine learning system. For example, during training the machine learning system identifies time-dependent and/or location-dependent acceleration or velocity features which discriminate between the classes of the motor task. In examples, the trained machine learning system computes, from the motion descriptors, the location dependent acceleration or velocity features which it has learned as being good discriminators. In various examples, a feature is computed using sub-volumes of the video.

IPC 8 full level
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